Weekly Wire
East Asia and Pacific
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AUSTRALIA: International Observing Network to Detect Increasing Ocean Acidification

The A$150,000 (US$155,585) mooring with its suite of environmental sensors is one of three in Australia's Integrated Marine Observing System that are included in the international network. The Maria Island and Great Barrier Reef sites are part of a growing international network of moorings, and are located to characterize changes in ocean acidification along the east coast of Australia. Sensors on the Maria Island mooring measure temperature, salinity, oxygen, chlorophyll and turbidity, while water samples are taken each month for plankton and nutrient studies. The data can be obtained at:
http://www.csiro.au/tasman/nrsweb/
http://www.csiro.au/Portals/Media/Maria-Island-joins-international-ocean-monitoring-network.aspx

AUSTRALIA: Reef Sharks Dive by the Moon and Water Temperature

Australian researchers report that the moon and water temperature affect the diving behavior of grey reef sharks. The researchers tagged sharks and used acoustic telemetry to follow them, finding they stayed in deep water on full moon nights but rose to the shallows with the new moon. The team also found that the water temperature affects sharks' behavior, suggesting that their being cold-blooded may make them prefer warmer waters to conserve energy. Their diving behavior potentially helps prevent sharks being inadvertently caught by fisherman at different times of the day.
http://www.abc.net.au/science/articles/2013/04/16/3738105.htm

JAPAN: 2014 Government Scholarship for International Students

The Ministry of Education, S&T offers scholarships to international students who wish to be enrolled in undergraduate programs in social science, humanities and natural sciences at Japanese universities beginning in April 2014.
http://www.mext.go.jp/a_menu/koutou/ryugaku/boshu/1333425.htm

JAPAN: Overviews of S&T Fields

Japan Science and Technology Agency's Center for R&D Strategy prepared overviews for various S&T fields among which the following have summaries in English. Comparisons with the U.S., Europe, China and South Korea are included.
Environment and Energy:
http://crds.jst.go.jp/singh/wp-content/uploads/12FR03.pdf (PP. 6-10 in English)
Life Science and Clinical Medicine:
http://crds.jst.go.jp/singh/wp-content/uploads/12FR04.pdf (PP. 5-8 in English)
Electronics, and Information and Communication:
http://crds.jst.go.jp/singh/wp-content/uploads/12FR05.pdf (PP. 5-7 in English)
Nanotechnology/Materials:

http://crds.jst.go.jp/singh/wp-content/uploads/12FR06.pdf (PP. 7-12 in English)
Systems Science and Technology:
http://crds.jst.go.jp/singh/wp-content/uploads/12FR07.pdf (PP. 7-12 in English)

JAPAN: Stopping the Rot
The RIKEN Center for Sustainable Resource Science has sequenced the entire genome of two fungi species and predicted their gene functions in order to identify the genetic basis for their pathogenicity. These fungi represent major threats to crops around the world, and are responsible for blight and post-harvest rot in plants as diverse as melons, strawberries, mangoes, coffee and leaf crops.
http://www.rikenresearch.riken.jp/eng/research/7236.html

JAPAN: Sony Launches World's Fastest Home Internet
So-net Entertainment, a Sony-backed Japanese ISP, has launched a fiber-based internet service that reaches download speeds of 2 gigabit per second (Gbps). The Nuro, as the service is called, is available to homes and small businesses in Tokyo and six surrounding prefectures. By comparison, the ultra-fast Google Fiber broadband internet service offers a "mere" 1 Gbps download speed which is still some 100 times faster than today's average home internet connection.
https://www.computerworld.com/s/article/9238392/Sony_ISP_launches_world_39_s_fastest_home_Internet_2Gbps?source=rss_latest_content&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+computerworld%2Fnews%2Ffeed+%28Latest+from+Computerworld%29#39;s%20fastest%20for%20home%20use

KOREA: Wireless Data Traffic Doubled
The Ministry of Science, ICT and Future Planning showed that wireless data traffic doubled from a year earlier. In addition to the fact that South Korea's smartphone population exceeded 30 million in August 2012, the sharp increase in wireless data traffic was boosted by a surge in the number of smartphone users who opted to connect their smartphones to the faster mobile network, called long-term evolution (LTE).
http://www.koreaherald.com/view.php?ud=20130417000337

NEW ZEALAND: Tectonic Research
One hundred and sixty scientists from around the globe gathered in Wellington last week to discuss potential projects examining the geology of subduction zones. The meeting was a workshop organized by GeoPRISMS, an initiative funded by NSF and tasked with investigating the processes that build and modify the continental margins where tectonic plates meet. As part of its earth science research program, NSF has selected NZ as one of three places where significant research effort will be expended to help understand what happens at the boundaries where tectonic plates meet.
http://www.gns.cri.nz/Home/News-and-Events/Media-Releases/Focus-on-NZ-tectonics

NEW ZEALAND: Antarctic Ice Melt Intensive
Researchers found data taken from an ice core show the summer ice melt in parts of Antarctica is at its highest level in 1,000 years. The team drilled a 364-meter deep ice core on James Ross Island, near the northern tip of the Antarctic Peninsula, to measure historical temperatures and compare

them with summer ice melt levels in the area. They found that, while the temperatures have gradually increased by 1.6 degrees Celsius over 600 years, the rate of ice melting has been more intense over the past 50 years.
http://www.stuff.co.nz/science/8556012/Antarctic-ice-melt-intensive

SINGAPORE: Single-cell Exploration Center
The Single-cell Omics Center was established by public-private partnership between the Genome Institute of Singapore and the Fluidigm Corporation. It is the first research center in Asia exclusively dedicated to accelerate the understanding of how individual cells work. The Center will be an important resource for researchers in the region who are interested in single-cell genomics.
http://www.a-star.edu.sg/?TabId=828&articleType=ArticleView&articleId=1802